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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/716,198	11/17/2003	Hung Van Nguyen	79-03A	4124

23713 7590 09/01/2005

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EXAMINER	
CINTINS, IVARS C	
ART UNIT	**PAPER NUMBER**
1724	

DATE MAILED: 09/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/716,198	NGUYEN ET AL.	
	Examiner	Art Unit	
	Ivars C. Cintins	1724	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-43 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-43 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☒ Certified copies of the priority documents have been received in Application No. 08/809,044.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 4/6/2005.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

The disclosure is objected to because the specification fails to contain a reference to prior U.S. Application Serial No. 10/650,785, for which benefit under 35 § U.S.C. 120 is apparently being sought (see page 1 of the IDS filed April 6, 2005), as required by 37 C.F.R. § 1.78(a)(2). Also, the relationship between this application and the prior application must be indicated, as further required by 37 C.F.R. § 1.78(a)(2).

Claims 1-43 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-16 of copending Application Serial No. 10/650,785. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims in this application are deemed to be obvious variations of claims 1-16 of Application Serial No. 10/650,785. This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claims 1-43 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-18 of U.S. Patent No. 6,669,849. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims in this application do not preclude the removal of humic and fulvic acids from the water undergoing treatment; and therefore, these claims do not patentably distinguish over claims 1-18 of Applicant's prior patent.

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed.

Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington,* 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 42 and 43 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor, at the time the application was filed, had possession of the claimed invention. The limitation that water and resin "in the tank" is subjected to membrane filtration (claims 42 and 43, step d) does not appear to be supported by the disclosure originally filed, and hence constitutes **new matter**.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –

> (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claims 42 and 43 are rejected under 35 U.S.C. 102(a) as being clearly anticipated by Patent Application Publication No. 2002/0121479. The reference discloses purifying drinking water with an ion exchange resin in a process tank, and subjecting the water and resin in the tank to membrane filtration, as required by claims 42 and 43. Applicant should note that since these claims are not supported by the disclosure of prior application Serial No. 08/809,044, they are not entitled to the benefit of the filing date of said prior application.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-6, 8, 10-17, 19, 20, 22-33 and 35-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jowett et al. (U.S. Patent No. 4,154,675) in view of Weiss et al. (U.S. Patent No. 3,560,378). Jowett et al. discloses removing organic carbon from water by dispersing an ion exchange resin into the water, separating the resin from the resultant mixture, and regenerating the resin with brine for reuse (see col. 11, lines 57-60; and col. 12, lines 13-15). This reference further discloses that the water can be subjected to additional treatments of the type recited (see col. 7, lines 42-44; and col. 8, lines 28-30). Accordingly, Jowett et al. discloses the claimed invention with the exception of the use of magnetic ion exchange resin particles. Weiss et al. discloses magnetic ion exchange resin particles of the type recited; and it would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute the magnetic ion exchange resin particles of the secondary reference for the ion exchange resin

particles of the primary reference, in order to enable separation of the resin from the treated water by magnetic means.

Claims 7 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jowett et al. and Weiss et al. as applied above, and further in view of Carlson et al. (U.S. Patent No. 4,670,154). The modified primary reference discloses the claimed invention with the exception of the recited vacuum collection step. Carlson et al. teaches (col. 3, lines 19-22) that it is known to transfer ion exchange resins utilizing a vacuum generating device. It would have been obvious to one of ordinary skill in the art at the time the invention was made to transfer the resin of the modified primary reference in the manner taught by Carlson et al., in order to obtain the advantages disclosed by this secondary reference for the system of the modified primary reference.

Claims 9 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jowett et al. and Weiss et al. as applied above, and further in view of Corne et al. (U.S. Patent No. 1,190,863). The modified primary reference discloses the claimed invention with the exception of the recited tilted plates. Corne et al. discloses (see Fig. 9) a settling tank having a series of tilted plates. It would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute the settling tank of the secondary reference for the settler of the modified primary reference (see col. 8, line 30 of Jowett et al.), since this secondary reference settling tank is capable of separating solids from a liquid in substantially the same manner as the settler of the modified primary reference, to produce substantially the same results.

Claims 34 and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jowett et al. and Weiss et al. as applied above, and further in view of Bacchus et al. (U.S. Patent No.

6,110,375). The modified primary reference discloses the claimed invention with the exception of the recited membrane treatment. Bacchus et al. teaches purifying water with an ion exchange resin, and subsequently subjecting the water to a treatment by a membrane filter (see col. 2, lines 50-60). It would have been obvious to one of ordinary skill in the art at the time the invention was made to subject the ion exchange resin treated water of the modified primary reference to a membrane filtration treatment, as suggested by Bacchus et al., in order to further purify this water.

Claims 42 and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jowett et al. in view of Bacchus et al. Jowett et al. discloses the claimed invention with the exception of the recited membrane treatment. Bacchus et al. teaches purifying water with an ion exchange resin, and subsequently subjecting the water to a treatment by a membrane filter. It would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute the membrane filter of the secondary reference for the filter of the primary reference (see col. 8, line 29 of Jowett et al.), since this secondary reference membrane filter is capable of separating ion exchange resin from water in substantially the same manner as the filter of the primary reference, to produce substantially the same results.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to I. Cintins whose telephone number is 571-272-1155. The examiner can normally be reached on Monday through Friday from 8:30 AM to 5:00 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Duane Smith, can be reached at 571-272-1166.

The centralized facsimile number for the USPTO is **571-273-8300**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ivars Cintins

Ivars C. Cintins
Primary Examiner
Art Unit 1724

I. Cintins
August 29, 2005